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PAPER NUMBER

CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE GB920000073US1 4857 05/01/2001 Fabrizio Loppini 09/846,572 EXAMINER 09/02/2004 7590 NGUYEN, LE V Edward H. Duffield

IBM Corp, IP Law Dept T81/503 3039 Cornwallis Road PO Box 12195 Research Triangle Park, NC 27709-2195

2174 DATE MAILED: 09/02/2004

ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

- \		
	Application No.	Applicant(s)
Office Action Summary	09/846,572	LOPPINI ET AL.
	Examiner	Art Unit
	Le Nguyen	2174
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period for reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
 Responsive to communication(s) filed on <u>27 M</u> This action is FINAL. 2b) This Since this application is in condition for allower closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-22 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	wn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on 01 May 2001 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	☑ accepted or b) ☐ objected to drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the prio application from the International Burear * See the attached detailed Office action for a list	s have been received. Is have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	Patent Application (PTO-152)

1. This communication is responsive to an amendment filed 5/2704.

2. Claims 1-22 are pending in this application. Claims 1 and 12 are independent claims; and, claims 1, 2, 7, 12, 13, 18 and 22 have been amended. This action is made

Final.

3. The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Specification

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 555 and 560 of fig. 5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. Claims 1-3, 7-11, 12-14 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh in view of Gallo et al. ("Gallo").

As per claim 1, Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint, the system comprising means for depicting a desktop which

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conceptually provides a three-dimensional surface for the icons, in which the three dimensional surface is represented on a two-dimensional display device with the icons are oriented to be facing the user viewpoint and means for supporting navigation of the desktop by simulating a rotation of the desktop in three-dimensional space with the location of the icons corresponding to their respective positions to other icons (Goh: Abstract; figs. 5-6; described and depicted is a three-dimensional workspace with realtime rotation with the icons oriented to be facing the user). Goh does not explicitly disclose the surface to be a smooth, rounded surface. Gallo teaches displaying a plurality of icons to a selected user viewpoint wherein the icons are oriented to be facing the user viewpoint and corresponding to their respective positions on a smooth, rounded surface (Gallo: figs. 1, 5 and 9; col. 6, lines 18-39; col. 11, lines 32-47). Therefore, it would have been obvious to an artisan at the time of the invention to include Gallo's teaching of displaying a plurality of icons to a selected user viewpoint wherein the icons are oriented to be facing the user viewpoint and corresponding to their respective positions on a smooth, rounded surface to Goh's teaching of displaying a plurality of icons wherein the icons are oriented to be facing the user and simulating a rotation in a three dimensional surface with the location of the icons corresponding to their respective positions to other icons in order to provide users with a maximal number of visible portals and that lends itself well to rotation upon any axis.

As per claim 2, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the desktop is viewed at an apparent distance from the user viewpoint and the means for depicting includes means for

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calculating a viewing distance for each of the plurality of icons based on the apparent distance and the location of the icon on the three-dimensional surface and means for scaling each of the plurality of icons by the relevant viewing distance with those icons on portions of the surface facing away from the desktop not being displayed (Gallo: figs. 1, 5 and 9-11; col. 7, lines 25-27; Goh: figs. 5-6; col. 6, lines 29-32; users control viewpoint, e.g. as can be seen from the comparison between figs. 5 and 6, icons are scaled according to users' viewpoint).

As per claim 3, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint comprising means for changing the apparent distance between the viewpoint and the desktop (Goh: figs 5-6; desktop 500 of fig. 5 is viewed from a closer distance than desktop 500 of fig. 6).

As per claim 7, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which an icon is initially added to the center of the desktop by default (Goh: col. 6, lines 20-21).

As per claim 8, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for supporting navigation is responsive to dragging the desktop with a pointing device in order to rotate the desktop (Goh: col. 6, lines 35-37).

As per claim 9, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the a means for supporting navigation that is responsive to dragging an icon beyond the desktop with a pointing device in order to rotate the desktop (Goh: col. 6, lines 35-37; desktop is rotated via axes icon(s)).

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As per claim 10, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the plurality of icons are grouped automatically according to pre-determined criteria (Goh: col. 6, lines 20-21).

As per claim 11, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the three-dimensional the three-dimensional surface is (Gallo: figs. 1, 10 and 11; col. 6, lines 18-39).

Claim 12 is similar in scope to claim 1 and is therefore rejected under similar rationale.

Claim 13 is similar in scope to claim 2 and is therefore rejected under similar rationale.

Claim 14 is similar in scope to claim 3 and is therefore rejected under similar rationale.

Claim 18 is similar in scope to claim 7 and is therefore rejected under similar rationale.

Claim 19 is similar in scope to claim 8 and is therefore rejected under similar rationale.

Claim 20 is similar in scope to claim 9 and is therefore rejected under similar rationale.

Claim 21 is similar in scope to claim 10 and is therefore rejected under similar rationale.

Claim 22 is similar in scope to claim 11 and is therefore rejected under similar rationale.

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6. Claim 4-6 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh (US 5,678,015) in view of Gallo et al. ("Gallo").

As per claim 4, although the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint comprising a means for storing the position of each of the plurality of icons, in which the position is stored as a two-dimensional co-ordinate relative to the display device (Goh: col. 6, lines 25-28; col. 6, line 63 through col. 7, line 7; col. 9, line 43 through col. 8, line 13), the modified Goh does not explicitly disclose storing the position of each of the plurality of icons in an array. Official Notice is taken that the use of storing data values, such as the position of an icon, in an array is well known in the art and considered to be fundamental to data structures, and, in turn, a major fundamental of computer programming. Therefore, it would have been obvious to an artisan at the time of the invention to include storing the position of each of the plurality of icons in an array of a GUI system for displaying a plurality of icons to the modified Goh's means for storing the position of each of the plurality of icons so that data values of the same type may be referenced by a singular array name.

As per claim 5, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for supporting navigation comprises a means for determining a new two-dimensional co-ordinate for each of the plurality of icons following rotation of the desktop and a means for updating the array accordingly (Goh: col. 6, lines 3-28).

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As per claim 6, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for determining comprises a means for transforming the two-dimensional co-ordinate of each of the plurality of icons into a three-dimensional co-ordinate, a means for changing the three-dimensional co-ordinates based on the rotation of the desktop and a means for transforming the changed three-dimensional co-ordinates into a new two-dimensional co-ordinate for each of the plurality of icons (Goh: col. 6, lines 3-42).

Claim 15 is similar in scope to claim 4 and is therefore rejected under similar rationale.

Claim 16 is similar in scope to claim 5 and is therefore rejected under similar rationale.

Claim 17 is similar in scope to claim 6 and is therefore rejected under similar rationale.

Response to Arguments

7. Applicant's arguments with respect to claims 1-22 have been considered but are most in view of the new ground(s) of rejection, except for the following arguments, which have been fully considered but are deemed not persuasive:

Goh does not teach sizing icons respective of distance from a viewpoint.

The examiner disagrees for the following reason(s):

Goh teaches displaying a plurality of icons to a selected user viewpoint wherein the icons are oriented to be facing the user viewpoint and with the size and location of Art Unit: 2174

the icons corresponding to their respective positions on a smooth, rounded surface (figs. 5 and 6; displayed in fig. 6 is a user's viewpoint after rotation to a new position with left, right and back windows depicted wherein icons "insight", "showmap" and "xcalc" on the right window in comparison with "insight", "showmap" and "xcalc" on the left window and fig. 5 appear in a size and location respective to their distance from the viewer and a viewpoint).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

KRISTINE KINCAID

KRISTINE KINCAID

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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Inquires

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lê whose telephone number is **(703) 305-7601** or **(571) 272-4068**. The examiner can normally be reached on Monday - Friday from 5:30 am to 2:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 872-9306 [Official Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

LVN Patent Examiner August 27, 2004